

**PMM1501  
15-Inch Monochrome  
Monitor**

**Installation/  
Operation Manual**

**C933M (7/99)**

# CONTENTS

<b>Section</b>	<b>Page</b>
IMPORTANT SAFEGUARDS AND WARNINGS .....	3
DESCRIPTION .....	3
MODELS .....	3
INSTALLATION .....	3
SURFACE MOUNT .....	3
RACK MOUNT .....	3
CONNECTIONS .....	4
SINGLE-MONITOR INSTALLATION .....	4
MULTIPLE-MONITOR INSTALLATION .....	4
OPERATION .....	5
MAINTENANCE .....	6
SPECIFICATIONS .....	7
REGULATORY NOTICES .....	8
WARRANTY AND RETURN INFORMATION .....	8

## LIST OF ILLUSTRATIONS

<b>Figure</b>	<b>Page</b>
1 Single-Monitor Installation .....	4
2 Multiple Monitor Installation .....	5
3 Location of Controls .....	5
4 Vertical Roll .....	6
5 Horizontal Tear .....	6

## LIST OF TABLES

<b>Table</b>	<b>Page</b>
A Video Coaxial Cable Wiring Distances .....	4

## IMPORTANT SAFEGUARDS AND WARNINGS

Observe the following warnings before installing and using this product.

1. Installation and servicing should be done by qualified installation and service personnel only.
2. Installation should be done according to all local and national electrical and mechanical codes, using only approved materials.
3. Use only installation methods and materials capable of supporting four times the maximum specified load.

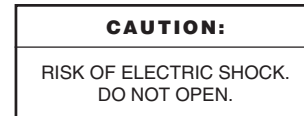
The product and/or manual may bear the following marks:



This symbol indicates that dangerous voltage constituting a risk of electric shock is present within this unit.



This symbol indicates that there are important operating and maintenance instructions in the literature accompanying this unit.



Please thoroughly familiarize yourself with the information in this manual prior to installation and operation.

## DESCRIPTION

The PMM1501 is a high resolution, black and white, CCTV video monitor. The cabinet is made of steel for ruggedness and, with the exception of the picture tube, the circuitry is all solid-state for reliability.

### MODELS

PMM1501	Black and white monitor, 15-inch (38.10 cm) picture display, 120 VAC, EIA standard. (CSA, FCC, UL)
PMM1501-X	Black and white monitor, 15-inch (38.10 cm) picture display, 230 VAC, CCIR standard. (CE)

## INSTALLATION

### SURFACE MOUNT

The monitor has rubber feet and may be placed on any horizontal surface, such as a desk or table.

### RACK MOUNT



**CAUTION:** Do not install this monitor in a location having excessive heat or in any way that obstructs the ventilation openings in the cabinet. Premature component failure or cabinet damage may result.

The monitor may be installed in a 19-inch (48.26 cm) rack using the following kit:

RMA1501      Rack kit for one 15-inch (38.10 cm) monitor

Follow the instructions that accompany the rack kit.

## CONNECTIONS

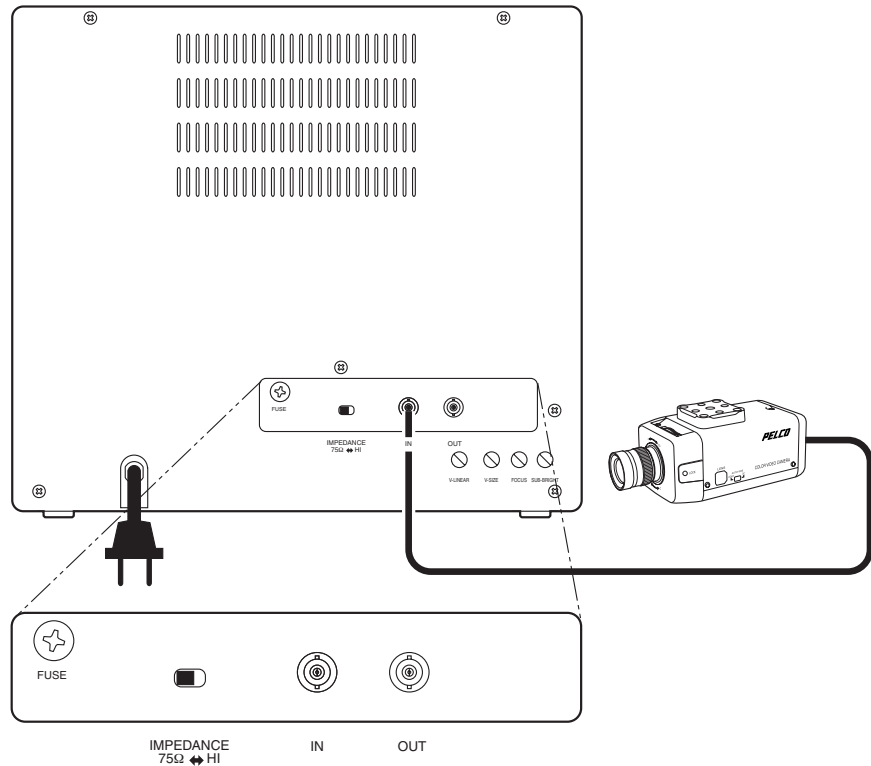
**Table A.** Video Coaxial Cable Wiring Distances

Cable Type	Maximum Distance
RG59	750 ft (229 m)
RG6	1,000 ft (305 m)
RG11	1,500 ft (457 m)

### SINGLE-MONITOR INSTALLATION

Refer to Figure 1 and Table A for the following instructions.

1. Set the impedance switch on the back of the monitor to 75 ohms.
2. Connect a 75-ohm video cable from the video source, such as a camera, to the BNC connector labeled IN on the back of the monitor.
3. Plug in the power cord.



**Figure 1.** Single-Monitor Installation

### MULTIPLE-MONITOR INSTALLATION

Refer to Figure 2 and Table A for the following instructions.

1. Connect a 75-ohm video cable from the video source, such as a camera, to the BNC connector labeled IN on the back of the first monitor.
2. Connect a 75-ohm video cable from the OUT connector on the back of the first monitor to the IN connector on the second monitor.
3. If you are using a third monitor, connect a 75-ohm video cable from the OUT connector on the back of the second monitor to the IN connector on the third monitor.
4. Set the impedance switch on the first monitor to HI.

If you are only using two monitors, set the impedance switch on the second monitor to 75 ohms.

If you are using three monitors, set the impedance switch on the second monitor to HI and on the third monitor to 75 ohms.

5. Plug in the power cords for the monitors.

**NOTE:** In multiple-monitor installations, a maximum of three monitors can be connected together.

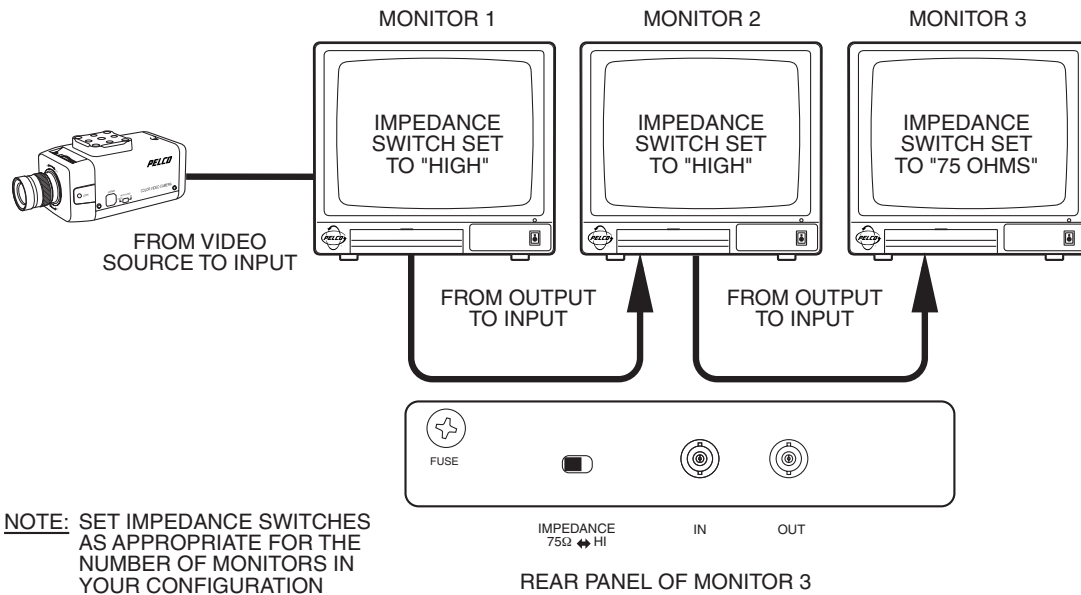


Figure 2. Multiple-Monitor Installation

## OPERATION

**NOTE:** On the back of the monitor there are adjustments for vertical linearity, vertical size, focus, and sub-brightness. These are special adjustments that should be made only by qualified service personnel.

The controls are located behind the door on the front of the monitor beneath the screen. Refer to Figure 3 for the locations of the controls.

**Power On/Off Switch** - This rocker switch turns the power on or off. Push the side with the white line to turn on the power. Push the side with the white circle to turn the power off.

**LED Power Indicator** - The LED lights when power is turned on.

**Brightness Control** - This control adjusts the overall picture brightness to compensate for differences in room lighting.

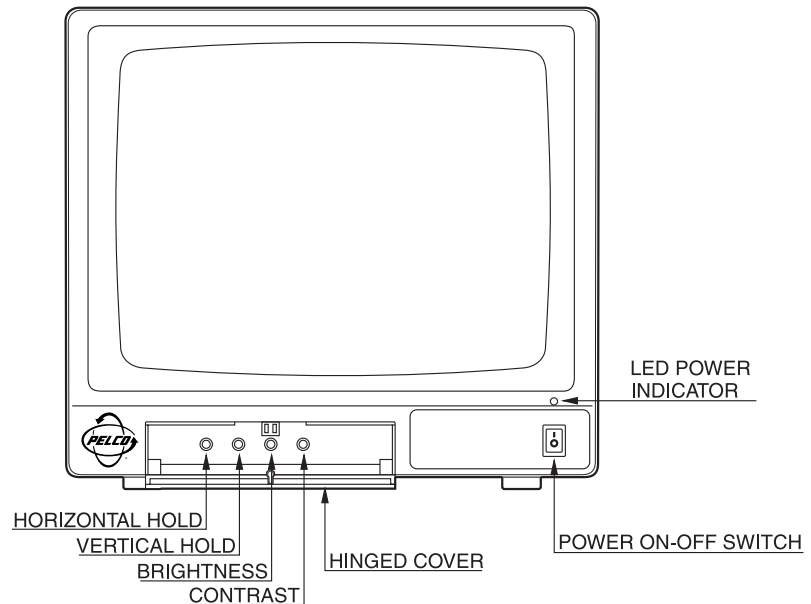


Figure 3. Location of Controls

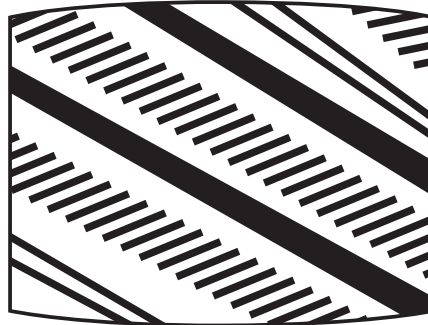
**Contrast Control** - This control adjusts the contrast between the black and white portions of the picture. When properly adjusted, you will be able to observe a fine gradation between blacks, grays, and whites.

**Vertical Hold Control** - This control permits adjustment of vertical stability. If the picture "rolls" upward or downward, as shown in Figure 4, turn the VERTICAL HOLD clockwise or counterclockwise until the picture stabilizes.

**Horizontal Hold Control** - This control permits adjustment of horizontal stability. If the picture "tears" to the left or right, as shown in Figure 5, turn the HORIZONTAL HOLD clockwise or counterclockwise until the picture stabilizes.



**Figure 4.** Vertical Roll



**Figure 5.** Horizontal Tear

To operate a monitor:

1. Make sure a standard 1.0 V peak-to-peak video signal is applied to the video input of the monitor.
2. Press the power switch to turn on the power. The power indicator LED will illuminate.
3. Adjust the brightness and contrast controls to obtain optimum picture quality.

## MAINTENANCE

The only maintenance required is to periodically clean the cabinet and screen.

Use a damp cloth to clean the screen.

Use mild soap and water to clean the cabinet. Some common household aerosol sprays, cleaning agents, solvents, or polishes may damage the cabinet finish. Dry the cabinet with a soft cloth.

## SPECIFICATIONS

### **ELECTRICAL**

Input Voltage:		
PMM1501	120 VAC, 60 Hz	
PMM1501-X	230 VAC, 50 Hz	
Power Consumption:		
PMM1501		
PMM1501-X	48 W	
Input Signal:	0.5 to 2.0 V peak-to-peak composite video, negative synchronization	
Input Impedance:	75 ohms or high (switchable)	
Bandwidth:	100 Hz to 10 MHz	
Video Gain:	30 dB	
Resolution:		
Center	1,000 lines	
Corners	800 lines	
Linearity:		
Horizontal	15% maximum	
Vertical	10%	
Operating System:		
EIA		
	Horizontal:	15,750 Hz $\pm$ 400 Hz
	Vertical:	60 Hz
CCIR		
	Horizontal:	15,625 Hz $\pm$ 400 Hz
	Vertical:	50 Hz

### **GENERAL**

Environment:	Indoor	
Construction:	Steel cabinet with black plastic front	
Finish:	Black matte texture coat finish	
Dimensions:		
PMM1501, PMM1501-X	14.17 in. W x 12.40 in. H x 13.38 in. D (36.0 x 31.5 x 34.0 cm)	
Picture Tube Dimension:		
PMM1501, PMM1501-X	15 inches (38.10 cm), measured diagonally	
Operating Temperature:	50° to 131°F (10° to 55°C)	
Weight:		
Unit		
	PMM1501, PMM1501-X	30.9 lb (14 kg)

*(Design and product specifications subject to change without notice.)*

## REGULATORY NOTICES

NOTE: This equipment has been tested and found to comply with the limits of a Class B digital device, pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However there is no guarantee that the interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try and correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

### PRODUCT WARRANTY AND RETURN INFORMATION

#### WARRANTY

Pelco will repair or replace, without charge, any merchandise proved defective in material or workmanship **for a period of one year** after the date of shipment.

Exceptions to this warranty are as noted below:

- Five years on FT/FR8000 Series fiber optic products.
- Three years on Genex® Series products (multiplexers, server, and keyboard).
- Three years on Camclosure® and fixed camera models, except the CC3701H-2, CC3701H-2X, CC3751H-2, CC3651H-2X, MC3651H-2, and MC3651H-2X camera models, which have a five-year warranty.
- Two years on standard motorized or fixed focal length lenses.
- Two years on Legacy®, CM6700/CM6800/CM9700 Series matrix, and DF5/DF8 Series fixed dome products.
- Two years on Spectra®, Esprit®, ExSite™, and PS20 scanners, including when used in continuous motion applications.
- Two years on Esprit® and WW5700 Series window wiper (excluding wiper blades).
- Eighteen months on DX Series digital video recorders, NVR300 Series network video recorders, and Endura™ Series distributed network-based video products.
- One year (except video heads) on video cassette recorders (VCRs). Video heads will be covered for a period of six months.
- Six months on all pan and tilts, scanners or preset lenses used in continuous motion applications (that is, preset scan, tour and auto scan modes).

Pelco will warrant all replacement parts and repairs for 90 days from the date of Pelco shipment. All goods requiring warranty repair shall be sent freight prepaid to Pelco, Clovis, California. Repairs made necessary by reason of misuse, alteration, normal wear, or accident are not covered under this warranty.

Pelco assumes no risk and shall be subject to no liability for damages or loss resulting from the specific use or application made of the Products. Pelco's liability for any claim, whether based on breach of contract, negligence, infringement of any rights of any party or product liability, relating to the Products shall not exceed the price paid by the Dealer to Pelco for such Products. In no event will Pelco be liable for any special, incidental or consequential damages (including loss of use, loss of profit and claims of third parties) however caused, whether by the negligence of Pelco or otherwise.

The above warranty provides the Dealer with specific legal rights. The Dealer may also have additional rights, which are subject to variation from state to state.

If a warranty repair is required, the Dealer must contact Pelco at (800) 289-9100 or (559) 292-1981 to obtain a Repair Authorization number (RA), and provide the following information:

1. Model and serial number
2. Date of shipment, P.O. number, Sales Order number, or Pelco invoice number
3. Details of the defect or problem

If there is a dispute regarding the warranty of a product which does not fall under the warranty conditions stated above, please include a written explanation with the product when returned.

Method of return shipment shall be the same or equal to the method by which the item was received by Pelco.

#### RETURNS

In order to expedite parts returned to the factory for repair or credit, please call the factory at (800) 289-9100 or (559) 292-1981 to obtain an authorization number (CA number if returned for credit, and RA number if returned for repair).

All merchandise returned for credit may be subject to a 20% restocking and refurbishing charge.

Goods returned for repair or credit should be clearly identified with the assigned CA or RA number and freight should be prepaid. Ship to the appropriate address below.

*If you are located within the continental U.S., Alaska, Hawaii or Puerto Rico, send goods to:*

Service Department  
Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699

*If you are located outside the continental U.S., Alaska, Hawaii or Puerto Rico and are instructed to return goods to the USA, you may do one of the following:*

If the goods are to be sent by a COURIER SERVICE, send the goods to:

Pelco  
3500 Pelco Way  
Clovis, CA 93612-5699 USA

If the goods are to be sent by a FREIGHT FORWARDER, send the goods to:

Pelco c/o Expeditors  
473 Eccles Avenue  
South San Francisco, CA 94080 USA  
Phone: 650-737-1700  
Fax: 650-737-0933

### REVISION HISTORY

Manual #	Date	Comments
C933M	2/97	Original version.
	7/99	Revised Figures 1 and 2 to show external fuse. Updated to new format.

Pelco, the Pelco logo, Camclosure, Esprit, Genex, Legacy, and Spectra are registered trademarks of Pelco. Endura and ExSite are trademarks of Pelco.

© Copyright 1999, Pelco.  
All rights reserved.